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REFERENCE NO.	TYPE DATE	FIRST COMM. IN ENCL. NO.	ATTORNEY DO. KELLY	CO-PATM. H.P.S.
178-748	178-748	Z-0000000000	7847-20-A	7714

Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

NGUYEN H.T.

APL-NH

TEPPER-KIMBLE

DATE MAILED TO APPLICANT

Please find below and/or attached an Office communication concerning this application or proceeding.

1012044

JASPER & BECKETT

Examiner

Art Unit

T. J. GILLEN

223

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Even though the period for reply expires on [REDACTED] (the mailing date of this communication), the shortened statutory period for reply will expire earlier if such reply is filed in the Office by [REDACTED] (the mailing date of this communication). Any reply filed after the due date will be subject to a surcharge under 37 CFR 1.16(e). The reply must be filed no later than [REDACTED] (the mailing date of this communication) or a shortened statutory period of [REDACTED] days from the mailing date of the final Office action, whichever comes first. The reply must also be timely filed in accordance with 37 CFR 1.133(b)(2). A timely filed extension request under 37 CFR 1.131(a) may be filed prior to the due date for reply.

Status

- 1) Response to communication(s) filed on _____
 2a) This action is FINAL 2b) This action is non-final
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 452 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 are pending in the application
 4a) Of the above claim(s) _____ is are withdrawn from consideration
 5) Claim(s) _____ is are allowed
 6) Claim(s) 1-12 are rejected
 7) Claim(s) _____ is are objected to
 8) Claim(s) _____ are subject to restriction and/or election requirement

Application Papers

- 9) The specification is objected to by the Examiner
 10) The drawings(s) filed on _____ is are rejected and/or objected to by the Examiner
 11) An attempt to correct the deficiency in the drawings(s) filed on _____ is made in accordance with 37 CFR 1.121(d). The proposed drawing correction filed on _____ is approved by the Examiner and/or disapproved by the Examiner.
 12) The oath or declaration is objected to by the Examiner

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or the AIA. Some * None of the following priority documents have been received:
 1) Certified copies of the priority documents have been received
 2) Certified copies of the priority documents have been received in Application No. _____
 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) A declaration is made that a claim for domestic priority under 35 U.S.C. § 119(e) is made pursuant to 37 CFR 1.14. The translation of the title in language(s) other than English has been received.
- 15) A declaration is made that a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121

Attachments(s)

- A copy of the communication is included in this communication. A copy of the communication is included in this communication, but it has been redacted. A copy of the communication is included in this communication, but it has been redacted and the redacted portion is included in this communication.

Detailed Office Action

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Afghahi (6,384,394).

With respect to claim 1, Afghahi discloses a pixel image sensor. The sensor comprises: a photodetector 206 (fig 2), a transistor 225 (fig 2), a charge to voltage conversion 202 (fig 2), a capacitor 225 (fig 2) connected in parallel with the charge voltage conversion

Afghahi does not explicitly disclose the capacitor designed to have a low voltage coefficient. However, the low voltage coefficient capacitor would have been known. It would have been obvious to modify Afghahi with the known low voltage coefficient capacitor to make the system more efficient.

With respect to claims 2, 7, since the connection in Afghahi is the same as the claimed invention, the capacitor provides a capacitance independent of a voltage on the charge to

voltage conversion mode would have been inherent.

With respect to claims 3-5, 8-10, the claimed capacitors would have been known in the art. It would have been a design choice to modify Afghahi with different capacitor types to use in different environments. The modification involves only routine skill in the art.

With respect to claim 6, refer to discussion in claim 1. Further, it would have been obvious to modify Afghahi's photodetector to operate as a charge to voltage conversion to make the sensor smaller.

With respect to claims 11-12, refer to discussion in claim 1 above. Further, it would have been obvious a design choice to modify Afghahi's transistor to operate as a common source amplifier for better performance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T Nguyen whose telephone number is (703) 306-9185. The examiner can normally be reached on M-T 7:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G Font can be reached on (703) 308-4881. The fax phone numbers for the organization where the application was received are (703) 872-9318 for regular

communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Tu Tuan Nguyen
Tu Tuan Nguyen

Patent Examiner TC 2877

1/10/03